EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CHERVON (HK) LIMITED, CHERVON NORTH AMERICA INC., *Plaintiffs*, v. **ONE WORLD TECHNOLOGIES, INC., TECHTRONIC INDUSTRIES CO. LTD., and HOMELITE CONSUMER PRODUCTS, INC.** *Defendants*.	C.A. No. 19-1293-LPS JURY TRIAL DEMANDED

DEFENDANTS' FINAL INVALIDITY CONTENTIONS

I. INTRODUCTION

Pursuant to Paragraph 4(d) of the Delaware Default Standard for Discovery, Defendants One World Technologies, Inc. and Techtronic Industries Co. Ltd. ("Defendants") submit their initial invalidity contentions with respect to the asserted claims identified by Plaintiffs Chervon (HK) Ltd. and Chervon North America Inc. ("Plaintiffs") in their February 21, 2020 Initial Infringement Contentions ("infringement contentions") as to U.S. Patent Nos. 9,060,463 ("the '463 patent"); 9,596,806 ("the '806 patent"); 9,826,686 ("the '26686 patent"); 9,986,686 ("the '86686 patent"); 10,070,588 ("the '588 patent"); 9,648,805 ("the '805 patent"); 10,477,772 ("the '772 patent"); 10,485,176 ("the '176 patent"); and 10,524,420 ("the '420 patent") (the "asserted patents").[1] With respect to the asserted claims and based on their investigation to date,

[1] Plaintiffs' infringement contentions assert '463 patent, claims 1-3 and 12-13; '806 patent, claims 1-4, 6-9, and 11-13; '26686 patent, claims 1-20; '86686 patent, claims 1-20; '588 patent, claims 1-12, 15-17, and 19-21; '805 patent, claim 1; '772 patent, claims 1-11 and 16-18; '176 patent, claims 1-16 and 19-30; and '420 patent, claims 1-2 and 6-15 (the "asserted claims")—a total of 129 asserted claims.

Defendants: (1) identify each item of prior art that anticipates or renders obvious each asserted claim; (2) specify whether each item of identified prior art anticipates or renders obvious (either alone or in combination) each asserted claim; (3) submit charts identifying where in each item of prior art each limitation of each asserted claim is found; and (4) identify grounds of invalidity based on 35 U.S.C. §§ 101 and 112 for certain of the asserted claims.

II. RESERVATION OF RIGHTS

Defendants' invalidity contentions are subject to amendment and/or revision in light of Defendants' ongoing investigation and discovery into the prior art, the defenses asserted by Defendants, the Court's claim construction rulings, and/or expert discovery. Discovery is not complete, and Defendants' search for and analysis of prior art is ongoing. Defendants also reserve the right to amend these contentions if Plaintiffs amend their infringement contentions and/or produce any information they should have provided with their infringement contentions. Defendants also reserve the right to contest Plaintiffs' understanding or interpretation of any claim limitations during the claim construction phase of this case, or thereafter.

Defendants' claim charts cite particular teachings, disclosures and figures of the prior art as applied the asserted claims. The cited portions are examples, and Defendants reserve the right to rely on uncited portions of the prior art, and on other publications, expert testimony, and other evidence as aids in understanding and interpreting the cited portions. Defendant's cited prior art may disclose the limitations of the asserted claims explicitly or inherently, and may be cited to show the state of the art at the relevant time. Furthermore, for each claim limitation Defendants contend is indefinite, Defendants have used their best efforts to interpret the claims to chart a given prior reference against that indefinite claim limitation.

Defendants reserve the right to contend that the asserted claims are invalid under 35 U.S.C. § 102(f) if discovery demonstrates that the named inventors did not invent the subject matter claimed in the asserted patents. Defendants also reserve the right to challenge the asserted claims under 35 U.S.C. § 112 on any grounds, including indefiniteness, lack of written description, lack of enablement, or failure to disclose the best mode.

III. IDENTIFICATION OF PRIOR ART

Pursuant to Paragraph 4(d) of the Delaware Electronic Discovery Default Standard, Defendants identify below each item of prior art that they contend anticipate and/or render obvious each asserted claim. For each United States or foreign patent reference listed, the identification of the reference includes corresponding patents and applications filed in other countries pursuant to the Patent Cooperation Treaty. For prior art systems, the identification of the system includes the physical system and all related documentation describing that system. Additionally, for each Asserted Patent, the prior art and foreign priority references cited in the prosecution histories of the Asserted Patent, its continuations, its ancestors, and any foreign counterparts are expressly incorporated by reference herein.

A. Prior Art for the '463 Patent.

Prior Art References for the '463 Patent
Akiba - US Patent No. 4,899,446
ANSI B71.1-2012
DE 3 827 926
Funabashi - JP 2013 165676
Guoxiong - CN 201 146 132 Y
Hesson - US Patent No. 6,006,434
Hurst - US Patent Application Publication No. 2006/096135
JP-H 0584102U
Keesee - US Patent No. 3,702,016
Legendre - FR 2,780,375
Letzel - US Patent No. 4,659,884

Prior Art References for the ’463 Patent
Lindermeir - EP 2 425 700
Matsunaga - US Patent No. 8,098,036
Reichart - GB 2,386,813
Scott - US Patent No. 3,230,695
CN’551 - CN 202 019 551 U
Tseng - US Patent Application Publication No. 2009/293655
Wick - US Patent No. 4,573,307

Prior Art Products or Systems for the ’463 Patent
Sun Joe SB600E electric trimmer
Homelite UT41110 electric trimmer
Greenworks 21212 electric string trimmer
Earthwise CST00012 electric string trimmer
Greenworks 21052 electric string trimmer
Ryobi RY14110 electric lawn mower
Ryobi RY40100 electric lawn mower
Neuton CE6 electric lawn mower
Cub Cadet CC 500 BAT electric lawn mower
Black and Decker CM2040 electric lawn mower
Toro e-Cycler 20360 electric lawn mower
Recharge Ultralite PMLI-14 electric lawn mower
Worx WG789 electric lawn mower

B. Prior Art for the ’806 Patent Family (the ’806, ’26686, ’86686, ’588, ’772, and ’176 Patents).

Prior Art References for the ’806 Patent Family
Abe - US Patent Application Publication No. 2012/317948
Adolfsson - WO 2012/115543
Ahn – US Patent No. 8,193,464
Akiba - US Patent No. 4,899,446
ANSI B71.1-2012
Braun - US Patent No. 5,020,308
CN’186 - CN 102 845 186 A
CN’363 - CN 202 873 363 U
Frey - US Patent No. 1,899,564
Fujioka - US Patent No. 4,882,897

Prior Art References for the '806 Patent Family
Fuku - JP 2009 034000
Fuku II - JP 2011 072211
Fuku III - JP 2013 153753
Guoxiong - CN 201 146 132 Y
Hayashi - JP 2013 063052
Hayashi II - JP 2013 066401A
Hilchey - US Patent No. 4,476,643
Huang - CN 2009 53749Y
Jonischus - US Patent No. 5,558,210
Joseph - US Patent No. 6,698,173
Kalleicher - EP 0 047 416
Kitamura - JP-H 05284834
Kober - EP 1 543 711
Langdon - US Patent No. 5,209,051
Li - CN 202 455 826 U
Marshall – US Patent No. 6,293,349
Matsunaga - US Patent No. 8,098,036
Meldahl - US Patent No. 3,253,391
Milcoy - US Patent No. 3,823,291
Nakano - WO 2013/122,266
Nofel - US Patent No. 4,161,639
Nottingham - US Patent Application Publication No. 2006/075732
Oka - JP-H 0530835
Outils Moteurs - FR 2,768,300
Owens - US Patent No. 4,221,108
Park - US Patent Application Publication No. 2011/302895
Reichart - GB 2,386,813
Reichart II - DE 102004020985A1
Roelle - US Patent No. 4,753,062
Schantz - US Patent No. 3,209,887
Smith - US Patent No. 2,702,448
Stiles – US Patent No. 2,867,960
Takeda - EP 2 622 953
Yoshioka – US Patent No. 3,809,837
CN'817 - CN 102 523 817 A

Prior Art Products or Systems for the ’806 Patent Family
Sun Joe SB600E electric trimmer
Homelite UT41110 electric trimmer
Greenworks 21212 electric string trimmer
Earthwise CST00012 electric string trimmer
Gardena 34 A easyMove Accu-Flexible Steerable Lawnmower
Gardena 34 E easyMove Electric Flexible Steerable Lawnmower
Greenworks 21052 electric string trimmer
Ryobi BMM2400 electric lawn mower
Ryobi BMM2418 electric lawn mower
Ryobi CMM2400 electric lawn mower
Ryobi CMM2410 electric lawn mower
Ryobi RY14110 electric lawn mower
Ryobi RY40100 electric lawn mower
Neuton CE6 electric lawn mower
Cub Cadet CC 500 BAT electric lawn mower
Black and Decker CM2040 electric lawn mower
Toro e-Cycler 20360 electric lawn mower
Recharge Ultralite PMLI-14 electric lawn mower
Worx WG789 electric lawn mower

C. Prior Art for the ’805 Patent.

Prior Art References for the ’805 Patent
Hayakawa - US Patent No. 4,932,622
Hu – CN 200 993 141Y
Idota - JP 2003 130017A
Langdon - US Patent No. 5,209,051
Outils Moteurs - FR 2,768,300
Ozawa - JP 2013 247888A
Pronzati - EP 0 822 346
Reichart - GB 2,386,813
Schantz - US Patent No. 3,209,887
Stelma - US Patent No. 4,181,333
Wu - US Patent No. 7,179,200

Prior Art Products or Systems for the ’805 Patent
Sun Joe SB600E electric trimmer

Prior Art Products or Systems for the ’805 Patent
Homelite UT41110 electric trimmer
Greenworks 21212 electric string trimmer
Earthwise CST00012 electric string trimmer
Gardena 34 A easyMove Accu-Flexible Steerable Lawnmower
Gardena 34 E easyMove Electric Flexible Steerable Lawnmower
Greenworks 21052 electric string trimmer
Ryobi RY14110 electric lawn mower
Ryobi RY40100 electric lawn mower
Neuton CE6 electric lawn mower
Cub Cadet CC 500 BAT electric lawn mower
Black and Decker CM2040 electric lawn mower
Toro e-Cycler 20360 electric lawn mower
Recharge Ultralite PMLI-14 electric lawn mower
Worx WG789 electric lawn mower

D. Prior Art for the ’420 Patent.

The prior art identified for the ’463 patent and the ’805 patent family above (Sections III.A and III.B) also anticipates and/or renders obvious the asserted claims of the ’420 patent, and is incorporated by reference here.

IV. PRIOR-ART BASED INVALIDITY CONTENTIONS

Pursuant to Paragraph 4(d), Defendants identify whether each item of prior art anticipates and/or renders obvious, either alone or in combination with other references or information, each asserted claim of the asserted patents.

A. Anticipation

The asserted claims are anticipated at least by the prior art charted in the claim chart exhibits listed below. The prior art identified in these exhibits is illustrative and not exhaustive. The claim charts provide illustrative citations to where each claim limitation may be found in the prior art, but the charted prior art may contain other disclosures of each claim limitation as well, and Defendants reserve the right to identify non-cited portions of the prior art at a later time if

necessary. To the extent Plaintiffs contend that any charted prior art reference fails to disclose one or more claim limitations of the asserted claims, Defendants reserve the right to contend that such reference qualifies as prior art under 35 U.S.C. § 103.

In addition to the charted arguments listed below, because the foreign priority claims for each of the '588, '772, '176, and '420 patents are ineffective under 35 U.S.C. § 119(a) and (c), and because the inventions claimed in these patents are fully disclosed in CN'186 and CN'363, the references CN'186 and CN'363 anticipate claims 1-20 of the '588 patent, claims 1-18 of the '772 patent, claims 1-12, 25-30 of the '176 patent, and claims 1-15 of the '420 patent.

Exhibit	Primary Prior Art Reference
A-1	Akiba
B-1	Outils
E-4	CN'363

B. Obviousness

The asserted claims are rendered obvious at least by the prior art charted in the claim chart exhibits listed below. The obviousness combinations identified below reflect Defendants' present understanding of the scope of the asserted claims that Plaintiffs appear to be advocating, and should not be construed as an acquiescence to Plaintiffs' interpretation of any asserted claim.

1. '463 Patent

Exhibit	Prior Art References
A-1	Akiba
A-2	Reichart in view of Akiba and Matsunaga
A-3	Langdon in view of Akiba and Matsunaga

2. '806 Patent

Exhibit	Prior Art References
B-1	Outils
B-2	Nakagawa
B-3	Outils in view of Langdon and Nakano

Exhibit	Prior Art References
B-4	Outils in view of Meldahl
B-5	Outils in view of Milcoy and Hilchey
B-6	Roelle in view of CN'186, Jonischus, and/or Adolfsson
B-7	Ryobi BMM2400 in view of Outils

3. '26686 Patent

Exhibit	Prior Art References
C-1	Roelle in view of CN'817, Akiba, and/or Jonischus
C-2	Outils in view of Roelle, Matsunaga, Langdon and/or Nakano
C-3	Ryobi BMM2400 in view of Outils, Roelle, Matsunaga, Langdon, and/or Nakano

4. '86686 Patent

Exhibit	Prior Art References
D-1	Reichart in view of Nakano and Outils
D-2	Langdon in view of Nakano and Outils
D-3	Ryobi BMM2400 in view of Reichart, Nakano, and Outils

5. '588 Patent

Exhibit	Prior Art References
E-1	Reichart in view of Nakano
E-2	Outils in view of Matsunaga, Langdon, Nakano, Milcoy, and/or Hilchey
E-3	Kober in view of Nakano
E-4	CN'363
E-5	Gardena 34 A easyMove in view of Nakano

6. '805 Patent

Exhibit	Prior Art References
F-1	Langdon in view of Idota
F-2	Langdon in view of Wu

7. '772 Patent

Exhibit	Prior Art References
G-1	Reichart in view of Akiba and/or Matsunaga
G-2	Reichart in view of Nakano
G-3	Reichart in view of Nakano and/or Matsunaga

Exhibit	Prior Art References
G-4	Nakano in view of Stiles and Marshall
G-5	Stiles in view of Akiba

8. '176 Patent

Exhibit	Prior Art References
H-1	Reichart in view of Akiba
H-2	Reichart in view of Nakano, Milcoy, Outils, Roelle, and/or Matsunaga
H-3	Nakano in view of Stiles and Marshall
H-4	Stiles in view of Akiba
H-5	Langdon in view of Nakano, Milcoy, Outils, Roell, and/or Matsunaga

9. '420 Patent

Exhibit	Prior Art References
I-1	Reichart in view of Akiba and/or Matsunaga
I-2	Nakano in view of Stiles and Marshall
I-3	Langdon in view of Akiba and Matsunaga

Defendants contend that no showing of a specific motivation to combine prior art is necessary to combine any of the prior art references identified above, because each combination of prior art would have had no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR Int'l Co. v. Teleflex, Inc*., 127 S. Ct. 1727, 1739-40, 1742 (2007) ("in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle"). Nevertheless, Defendants identify additional motivations and reasons to combine these prior art references.

One or more combinations of the prior art references identified above would have been obvious because these prior art references would have been combined using: (a) known methods to yield predictable results; (b) known techniques in the same way; (c) a simple substitution of one known, equivalent element for another to obtain predictable results; and/or (d) a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to

try combining the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompted variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combination of prior art references identified above would have been obvious because the combination represents the known potential options with a reasonable expectation of success. Additional evidence that there would have been a motivation to combine the prior art references identified above includes the interrelated teachings of multiple items of prior art; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution encompassed by the asserted claims; the existence of a known need or problem in the field of the endeavor at the time of the invention(s); and the background knowledge that would have been possessed by a person having ordinary skill in the art. Thus, the motivation to combine the teachings of the prior art references identified above is found in the prior art references themselves and in: (a) the nature of the problem being solved; (b) the express, implied and inherent teachings of the prior art; (c) the knowledge of persons of ordinary skill in the art; (d) the fact that the prior art is generally directed toward similar technology; and/or (5) the predictable results obtained in combining the different elements of the prior art.

Furthermore, Defendants' inclusion of exemplary combinations, in view of the factors and motivations identified in the preceding paragraphs, does not preclude Defendants from identifying other invalidating combinations as appropriate. A person having ordinary skill in the art would have found all of the art cited herein to be in the same field of endeavor – lawn and garden tools having a motorized cutting implement, and the mechanical pieces incorporated to make them safer. In particular, a person having ordinary skill in the art would be familiar with

lawnmowers would also be familiar with power heads, string trimmers, and other rotary trimmers. Indeed, a lawn mower is little more than a rotary trimmer placed on wheels to support a larger, metal cutting implement. In the examples of the '463, '806, '26686, '86686, '772, '176, and '420 patents, a person having ordinary skill in the art would have been motivated to combine the teachings found in various lawn mowers, powerheads, and string trimmers (Roelle, Langdon, Frey, Outils, Reichart, Ryobi RY14100, Homelite UT41110, etc.) with the teachings of electrically switched safety devices incorporated into such garden tools (Akiba, Nakagawa, Nakano, Matsunaga, etc.) because each comes from the same technological area and would have been motivated by the mandate to increase user safety. Additionally, with the same motivation, a person having ordinary skill in the art would have found that the teachings found in any of the gardening tool art involving telescoping handles (Langdon, Reichart, Akiba, Nakano, Sun Joe SB600E, Greenworks 21212, etc.) could have been combined with teachings involving clamps to hold telescoping handles in place under a load (Idota, Pronzati, Ozawa, Wu, etc.). Telescoping rods were not new technologies at the time to which these patents claim priority, and solutions for locking telescoping rods were abundant in all the arts implementing telescoping rods. As such, a person of ordinary skill in the art having chosen to employ telescoping rods in her design would have been motivated to look beyond lawn and garden equipment to the larger universe of securing telescoping rods for use in lawn and garden equipment. Furthermore, the Federal regulations and ANSI standards mandating a heightened security standard for manufacturers of garden tools would have propelled persons of ordinary skill to seek out additional references to meet the safety requirements of the tools that are the subject of the asserted patents. A person having ordinary skill in the art designing a lawnmower would have been very familiar with the government mandated safety standards found in 16 C.F.R. § 1205 and ANSI B71.1-12, among

others. Those standards would have motivated a person having ordinary skill in the art to seek other example art to improve the safety of her designs. As such, one of ordinary skill in the art would have been motivated to combine any of the references identified above. All of these technologies were well known at the time and could easily become substitute for one another.

V. SECTION 112-BASED INVALIDITY CONTENTIONS

Defendants identify the grounds of indefiniteness based on 35 U.S.C. § 112(b) and lack of enablement and/or written description under 35 U.S.C. § 112(a) of the asserted claims. Based on Defendants' present understanding of the asserted claims and Plaintiffs' apparent interpretation of the claims as evidenced by its infringement contentions, Defendants contend that certain asserted claims fail to meet the requirements of 35 U.S.C. § 112. Defendants expressly incorporate by reference their arguments presented at claim construction with respect to Section 112.

A. Written Description Contentions Under 35 U.S.C. § 112(a).

AIA Section 112 requires that a specification "contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which is most nearly connected, to make and use the same." To meet this requirement, the patent specification must describe the claimed invention in sufficient detail that a person of skill in the art can reasonably conclude that the named inventor had possession of the claimed invention. *Ariad Pharma, Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*). A claim is invalid for lack of enablement under 35 U.S.C. § 112 if the specification fails to "teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation." *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1378 (Fed. Cir. 2009). "Enabling the full scope of each claim is part of the quid pro quo of the patent

bargain." *Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 999 (Fed. Cir. 2008); *Nat'l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1196 (Fed. Cir. 1999). As set forth below, a number of asserted claims are invalid because they do not meet at least the written description and enablement requirements.

1. The '463 Patent

Term	Claim(s)
"a hollow level-1 handle"	12

Claim 12 is invalid under 35 U.S.C. § 112(a) and (b) because the term "a hollow level-1 handle" is unclear and has no enabling written description in patent specification. The dependent claims fail to cure these deficiencies and are invalid for the same reason.

2. The '806 Patent

Term	Claim(s)
"switch" or "signal source"	All claims
"telescopic tubes"	3, 4, 8, 9, 13
"locks" "unlocks"	1, 6
"designated position"	3, 8

All claims are invalid under 35 U.S.C §112(a) because there is no enabling written description that permits a person of ordinary skill in the art to make and use the claimed invention. Claims 1-13 recite the term "switch" or "signal source" or "sending a control signal" and are invalid under 35 U.S.C. § 112(a) and (b). The specification tries to distinguish them (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('806, 5:63-64)), and assigns the function of sending a control signal to only a signal source device (*e.g.*, the "first signal source device may be a photoelectric switch which participates in control by sending a control signal to the switch in the power supply circuit" ('806, 6:17-17), but Plaintiffs' infringement contentions make the illogical suggestion

that a switch which is incapable of sending a control signal can nevertheless send a control signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined.

Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 1-13) are invalid under § 112(b), because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit.

Claims 1 and 6 are invalid under 35 U.S.C. § 112(a) because there is no enabling written description for a control device that "locks" and/or "unlocks" any other component including but not limited to another control device that starts the motor. The dependent claims fail to cure these deficiencies and are invalid for the same reason.

Claims 3 and 8 are invalid under 35 U.S.C. § 112(a) and (b) because "the designated position" of claims 1 and 6 is associated with a rotating position ("the handle rotates to the designated position") but claims 3 and 8 recite it as a telescoping position ("when the telescopic

tube extends to the designated position"). The patent specification provides no enabling written description of a telescopic tube rotating relative to another telescopic tube or tubes.

All claims that recite telescoping or sliding components (*e.g.*, claims 3-4, 8-9) are invalid under 35 U.S.C. § 112(a) because the specification fails to provide an enabling written description of how those components stay assembled. The disclosure suggests that the telescoping components have nothing to prevent them from being separated, so a self-driven mower would pull away from a user and disassemble the handle. The disclosure also suggests that the telescoping components would collapse into one another due to gravity or any pushing force from the user. A person of ordinary skill would have found such details critical to understanding how to make and use the invention.

3. The '26686 Patent

Term	Claim(s)
"switch" or "signal source"	All claims
"telescopic members"	8, 9, 10, 18, 19, 20
"locks" / "unlocks"	1, 11
"the designated position"	8, 18

All claims are invalid under 35 U.S.C §112(a) because there is no enabling written description that permits a person of ordinary skill in the art to make and use the claimed invention. All claims recite the term "switch" or "signal source" or "sending a control signal" and are invalid under 35 U.S.C. § 112(a) and (b). The specification tries to distinguish them (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('26686, 5:66-67)), and assigns the function of sending a control signal to only a signal source device (*e.g.*, the "first signal source device may be a photoelectric switch which participates in control by sending a control signal to the switch in the power supply circuit" ('26686, 6:19-21)), but Plaintiffs' infringement contentions make the illogical suggestion

that a switch which is incapable of sending a control signal can nevertheless send a control signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined.

Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 1-20) are invalid under § 112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit.

Claims 1 and 11 are invalid under 35 U.S.C. § 112(a) because there is no enabling written description for a control device that "locks" and/or "unlocks" any other component including but not limited to another control device that starts the motor. The dependent claims fail to cure these deficiencies and are invalid for the same reason.

Claims 8 and 18 are invalid under 35 U.S.C. § 112(a) and (b) because "the designated position" of claims 1 and 11 is associated with a rotating position ("the handle rotates to a designated position") but claims 8 and 18 recite it as a telescoping position ("…extends to the

designated position"). The patent specification provides no enabling written description of a telescopic tube rotating relative to another telescopic tube or tubes.

The '26686 patent specification does not enable the telescopic tubes because it fails to explain how tubes 20a, 20b stay in place. Nothing is disclosed to prevent tube 20a from being completely withdrawn from tube 20b; a self-driven mower would pull away from a user and disassemble the handle. Similarly, gravity or any forward or inwardly directed force (like the user pushing the mower) would cause tube 20a to fall or collapse into tube 20b. The disclosure of the telescoping handle embodiments therefore fails under 35 U.S.C. 112(a).

4. The '86686 Patent

Term	Claim(s)
"telescopic members"	8, 9, 10, 18, 19, 20
"switch" "signal source" or "send(ing) a signal"	2-7, 9-10, 12-17, 19-20
plural signal sources to enable or disable motor operation	10, 20

All claims that recite telescoping or sliding components (*e.g.*, 1-7 (sliding), 8-10 (sliding and telescopic), 11-17 (sliding), 18-20 (sliding and telescopic)) are invalid under 35 U.S.C. § 112(a) because the specification fails to provide an enabling written description of how those components stay assembled. The disclosure suggests that the telescoping components have nothing to prevent them from being separated, so a self-driven mower would pull away from a user and disassemble the handle. The disclosure also suggests that the telescoping components would collapse into one another due to gravity or any pushing force from the user. A person of ordinary skill would have found such details critical to understanding how to make and use the invention.

All claims that recite the term "switch" or "signal source" or "send(ing) a signal" are invalid under 35 U.S.C. § 112(a) and (b) because the specification tries to distinguish them (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('86686, 6:1-2)), and assigns the function of sending a control signal to only a signal source device (*e.g.*, the "first signal source device may be a photoelectric switch which participates in control by sending a control signal to the switch in the power supply circuit" ('86686, 6:20-22)), but Plaintiffs' infringement contentions make the illogical suggestion that a switch which is incapable of sending a control signal can nevertheless send a control signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined.

Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 2-7, 9-10, 12-17, 19-20) are invalid under § 112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit.

Claims 10 and 20 are invalid under 35 U.S.C. § 112(a) because there is no enabling written description of using plural signal sources to enable or disable operation of the motor based on the position of one telescopic member relative to another.

5. The '588 Patent

Term	Claim(s)
"telescopic members"	1-10, 12-14, 16, 17, 21
"the signal source enables the operation of the operation assembly to the motor"	10
"the signal source disables the operation of the operation assembly to the motor"	10
"switch" or "signal source"	15-21

Claims 1-10, 12-14, 16, 17, and 21 are invalid under 35 U.S.C §112(a) because there is no enabling written description that permits a person of ordinary skill in the art to make and use the claimed invention. The '588 patent specification does not enable the telescopic tubes because it fails to explain how tubes 20a, 20b stay in place. Nothing is disclosed to prevent tube 20a from being completely withdrawn from tube 20b; a self-driven mower would pull away from a user and disassemble the handle. Similarly, gravity or any forward or inwardly directed force (like the user pushing the mower) would cause tube 20a to fall or collapse into tube 20b. The disclosure of the telescoping handle embodiments therefore fails under 35 U.S.C. 112(a).

The claim terms "the signal source enables the operation of the operation assembly to the motor" and "the signal source disables the operation of the operation assembly to the motor" are not described in the written description, rendering claim 10 invalid. The test for written description is that it must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *See, e.g., Moba, B.V. v. Diamond Automation, Inc*., 325 F.3d 1306, 1319 (Fed. Cir. 2003). An applicant shows possession of the claimed invention by describing the claimed invention with all of its

limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. Amer. Airlines*, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997). Claim 10 fails to describe these limitations.

Claim 10 requires that the "signal source for sending signals to the power supply circuit" "enables the operation of the operation assembly to the motor" and "disable the operation of the operation assembly to the motor." However, there is no disclosure in the specification breathing life into this vague term. While the specification does disclose the operation assembly enabling the motor when controlled by the user, *see* '588 patent at 5:26-31, it does not describe the enablement or disablement of the operation assembly, and further does not describe how it would be enabled or disabled by a signal source.

All claims that recite the term "switch" or "signal source" or "send(ing) a signal" are invalid under 35 U.S.C. § 112(a) and (b) because the specification tries to distinguish them (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('588, 6:1-2)), and assigns the function of sending a control signal to only a signal source device (*e.g.*, the "first signal source device may be a photoelectric switch which participates in control by sending a control signal to the switch in the power supply circuit" ('588, 6:20-22)), but Plaintiffs' infringement contentions make the illogical suggestion that a switch which is incapable of sending a control signal can nevertheless send a control signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined.

Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 2-21) are invalid under § 112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit.

6. The '772 Patent

Term	Claim(s)
"telescoping pipes"	1-10, 11-18
"switch" or "signal source"	1-10
"signal source mounted to the main body"	7
"control device … to allow/prevent the motor to be activated by the operation assembly"	8
"safety assembly … positioned between the outer pipe and the inner pipe"	11-15
"force upon the inner pipe to inhibit the inner pipe from being moved towards the main body"	12-15
"rotatably moveable"	14
"trigger switch"	16

Claims 1-18 are invalid under 35 U.S.C §112(a) because there is no enabling written description that permits a person of ordinary skill in the art to make and use the claimed invention. A person of ordinary skill would understand that, during use, an operator extends the

telescopic handle 20 or operating arm 2 to an in-use, operating length. *Id*. 7:44-50. The patent disclosure fails, however, to describe how to keep the telescopic pipes 21, 25 at their extended, in-use position. No locking mechanism is disclosed, leaving the impression that the pipes would collapse into one another due to gravity or any pushing force from the user. An active drive would pull the user-held pipe apart from the main-body-connected pipe. A person of ordinary skill is left only with the structure of Figures 5, 6 and 13 to somehow make and use an operating arm whose pipes stay at their in-use position and can withstand the operator's "hand push" (*id*., 8:34). Figures 5 and 6 show nothing to prevent pipes 20a, 20b from separating or collapsing into one another. Figure 13 shows a safety assembly including a resilient "spring sheet 2402" (*id*., 9:43-44) which claim 12 suggests "provides a second force upon the inner pipe [25] to inhibit the inner pipe from being moved towards the main body [of the lawn care apparatus]…." '772 patent, claim 12. How to implement this force, and how strong it must be, is not explained in the body of the '772 patent. A person of ordinary skill is left to speculate and would have to undertake undue experimentation to determine (1) the force with which spring sheet 2402 must press against the inner pipe 25 and (2) the appropriate mating surface angles of its U-shaped tip and the indented groove's wall, in order to inhibit retraction against the pushing force of the operator, while also permitting retraction to fold the mower into the configurations of Figures 11-12, 14-15.

All claims require "two telescopic members" (10:64; claims 1-10) or "an inner pipe and an outer pipe" ('772 patent, 12:21; claims 11-18) and a "control device" (*id*., 10:66; claims 1-10) or "safety assembly" (*id*., 12:27; claims 11-18) that depends on members'/pipes' relative position. These components correspond to the deficiently-described coupling between the inner pipe 25 and the pipe sleeve 224 at the end of outer pipe 201. *Id*. 9:25-331; 3:20-24. Claim 12

further recites the "second force" cited above. However, as explained in the preceding paragraphs, the disclosure of the '772 patent fails to provide an enabling written description of how to make and use the claimed invention.

Claim 4 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a switch mounted to the main body that is associated with sensing the telescopic extension of telescoping handle members.

Claim 7 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a signal source mounted to the main body that is associated with sensing the telescopic extension of telescoping handle members.

Claim 8 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a "control device … to allow [and to prevent] the motor to be activated by the operation assembly" where the control device has a switch triggered by the operation assembly.

Claims 1-10 recite the term "switch" or "signal source" or "sending a control signal" and are invalid under 35 U.S.C. § 112(a) and (b). The specification tries to distinguish switches from signal sources (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('772 patent, 6:21-22)), but Plaintiffs' infringement contentions make the illogical suggestion that a switch which is incapable of sending a control signal can nevertheless send a control signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined.

Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by

requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 2-10) are invalid under § 112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit.

Claim 16 recites "a safety assembly comprising a trigger switch…." '772 patent, 12:49. The term "trigger switch" appears nowhere in the body of the patent specification. It was included in originally filed dependent claim 16 ('772 Patent prosecution history, 688). First, the term "trigger switch" is not described or defined anywhere in the '772 patent, making it unclear to a person of ordinary skill what type of structure(s) it is intended to encompass. Second, the term "trigger switch" has a known meaning outside the '772 patent as a "switch that is actuated by pulling a trigger, and is usually mounted in a pistol-grip handle." *See* McGraw-Hill Dictionary of Scientific and Technical Terms (Sixth Edition), p. 2191. But there is nothing in the patent disclosure that informs a person of ordinary skill how to make or use the invention using that type of structure. Therefore, the claimed "trigger switch" is not supported by an enabling written description, rendering claim 16 invalid under 35 U.S.C. § 112(a).

Claim 4 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a switch mounted to the main body that is associated with sensing the telescopic extension of telescoping handle members.

Claim 7 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a signal source mounted to the main body that is associated with sensing the telescopic extension of telescoping handle members.

Claim 8 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of, and it makes no sense for, a "control device … to allow [and to prevent] the motor to be activated by the operation assembly" where the control device has a switch triggered by the operation assembly.

Claims 11-15 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a "safety assembly … positioned between the outer pipe and the inner pipe…."

Claims 12-15 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of component(s) providing a "force upon the inner pipe to inhibit the inner pipe from being moved towards the main body…." There is also no enabling written description of the amount of force to be used to accomplish any intended results.

Claim 14 requires that the "moveable element is rotatably moveable." The moveable element must be "biased towards the inner pipe" (*see* claim 13) and corresponds to the disclosed "trigger assembly 242" in Figure 3. That component, however, is a "spring sheet 242" (*id*., 3:39-40) that a person of ordinary skill would understand to flex, and not rotate.

The notion of rotational movement by the claimed "moveable element" appears nowhere in the body of the patent specification; such movement is not associated with the flexure of spring sheet 242. "Rotatably moveable" was only mentioned in originally filed dependent claim 4 ('772 patent prosecution history, 686) although a different component, the outer pipe 21, is described in the specification as "rotatably" connected to the mower's main body 1 by a pivot

shaft 22. '772 patent, 3:25-27. A person of ordinary skill would understand this "rotatable" movement, and thus the term in claim 4, consistent with the plain and ordinary meaning of "rotate" which is: to turn around on or as if non an axis: revolve (Random House Webster's Dictionary (1999), p.1145) and "moveable": capable of being moved; not fixed in one place, position, or posture (*id*., p.865). To the extent "rotatably moveable" refers to flexure of a spring sheet, the prior art described above disclosed identical rotatable movement. To the extent it requires the ability to turn around on an axis, claim 4 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a component biased toward the inner pipe that is "rotatably movable."

7. The '176 Patent

Term	Claim(s)
"telescoping pipes"	All claims
"switch" / "signal source"	All claims
operating assembly including both "trigger" and "button"	12
"a force to inhibit the inner pipe from being moved to the designated sliding position"	17-18
a component biased towards the inner pipe that is "rotatable relative to the inner pipe"	18
"trigger switch"	19
"second signal source for sending a control signal to the first control device"	21
"second switch for sending a control signal to the first control device"	22

All claims that recite telescoping or sliding components (*e.g.*, claims 1-30) are invalid under 35 U.S.C. § 112(a) because the specification fails to provide an enabling written description of how those components stay assembled. The disclosure suggests that the telescoping components have nothing to prevent them from being separated, so a self-driven mower would pull away from a user and disassemble the handle. The disclosure also suggests

that the telescoping components would collapse into one another due to gravity or any pushing force from the user. A person of ordinary skill would have found such details critical to understanding how to make and use the invention.

All claims that recite the term "switch" or "signal source" or "send(ing) a signal" are invalid under 35 U.S.C. § 112(a) and (b) because the specification tries to distinguish them (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('806, 5:63-64)), and assigns the function of sending a control signal to only a signal source device (*e.g.*, the "first signal source device may be a photoelectric switch which participates in control by sending a control signal to the switch in the power supply circuit" ('806, 6:17-17), but Plaintiffs' infringement contentions make the illogical suggestion that a switch which is incapable of sending a control signal can nevertheless send a control signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined.

Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 2-10, 21-22, 27-29) are invalid under § 112(b) because the written description fails to inform persons of ordinary skill in

the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit; or connected "in" a control circuit as opposed to sending a signal "to" a control circuit (*e.g.*, claims 27-29); or being part of a "control device" as opposed to sending a signal "to" a control device (e.g., claims 21-22).

Claim 12 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of the operating assembly including both a "trigger" and a "button."

Claims 17-18 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of component(s) providing a force to inhibit the inner pipe from being moved to the designated sliding position (which is the use position according to parent claim 13).

Claim 18 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a component biased toward the inner pipe that "is rotatable relative to the inner pipe," leaving the scope of the claim unclear.

Claim 19 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description or definition of a "trigger switch" leaving the scope of the term unclear.

Claim 21 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a "second signal source for sending a control signal to the first control device."

Claim 22 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a "second switch for sending a second control signal to the first control device."

8. The '420 Patent

Term	Claim(s)
"telescoping pipes"	All claims
"trigger switch"	1-15

Term	Claim(s)
"force upon the inner pipe to inhibit the inner pipe from being moved towards the main body"	2
"rotatably moveable"	4

All claims are invalid under 35 U.S.C §112(a) because there is no enabling written description that permits a person of ordinary skill in the art to make and use the claimed invention. The '420 patent is directed to "a hand push lawnmower." '420 patent, 2:32. The description is focused on a folded, storage configuration of the lawnmower, but a person of ordinary skill would understand that, in order to push the lawnmower during use, an operator extends the telescopic operating arm 2 and grips a gripping portion 23 atop that arm. *Id*. 2:47-50. The patent disclosure fails to describe, however, how to keep the telescopic pipes 21, 25 at their extended, in-use position. Claims including telescoping pipes fail to meet the enablement requirement for the same reasons as explained with respect to such pipes in the '772 patent.

Claims 1-15 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description or definition of a "trigger switch" leaving the scope of the term unclear. The term "trigger switch" is understood by POSITA to be a "switch that is actuated by pulling a trigger, and is usually mounted in a pistol-grip handle." McGraw-Hill Dictionary of Scientific and Technical Terms (Sixth Edition), 2000, p.2191. No such switch is disclosed, so the claims are not consistent with the written description. The dependent claim recite specific structures for the claimed "safety switch assembly" but never tie those structures to the "trigger switch," leaving the metes and bounds of the "trigger switch" indiscernible.

Claim 2 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of component(s) providing a "force upon the inner pipe to inhibit the inner pipe from

being moved towards the main body…." There is also no enabling written description of the amount of force to be used to accomplish any intended results.

Claim 4 requires that the "moveable element is rotatably moveable." The moveable element must be "biased towards the first member" (*see* claim 3) and corresponds to the disclosed "trigger assembly 242" in Figure 3. That component, however, is a "spring sheet 242" (*id*., 3:39-40) that a person of ordinary skill would understand to flex, not rotate. This claim fails to meet the written description requirement for the same reasons as explained for "rotatably moveable" in the '772 patent.

B. Indefiniteness Contentions Under 35 U.S.C. § 112(b)

"The statutory requirement of particularity and distinctness in claims is met only when [the claims] clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise." *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942). "Indefiniteness is a matter of claim construction, and the same principles that generally govern claim construction are applicable to determining whether allegedly indefinite claim language is subject to construction." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1348 (Fed. Cir. 2005). Furthermore, "a patent's claims, viewed in light of the specification and prosecution history, [must] inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instr., Inc.*, 134 S.Ct. 2120, 2129 (2014). It is not sufficient that a court can ascribe some meaning to a patent's claims; the indefiniteness requirement "mandates clarity." *Nautilus, Inc. v. Biosig Instr., Inc.*, 134 S.Ct. 2120, 2134 (2014).

At least the following asserted claims fail to satisfy the definiteness requirements of 35 U.S.C. § 112(b).

1. The '463 Patent

Term	Claim(s)
"a hollow level-1 handle"	12

Claim 12 is invalid under 35 U.S.C. § 112(a) and (b) because the term "a hollow level-1 handle" is unclear and has no enabling written description in patent specification. The dependent claims fail to cure these deficiencies and are invalid for the same reason.

2. The '806 Patent

Term	Claim(s)
"switch"	1, 2, 3, 4, 9, 13, 14, 19
"switch" or "signal source"	All claims
"the designated position relative to the main body"	1, 6
"the designated position"	3, 8
"the power supply circuit"	1, 6
"a power supply circuit"	7
"the telescopic tube" (singular)	3, 8
"when the control system is stopping the motor"	5, 10
"contact switch contacted by the trigger"	11
"contact switch disposed at an end of a telescoping tube"	13

All claims that recite the term "switch" or "signal source" or "send(ing) a signal" are invalid under 35 U.S.C. § 112(a) and (b) because the specification tries to distinguish them (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('806, 5:63-64)), and assigns the function of sending a control signal to only a signal source device (*e.g.*, the "first signal source device may be a photoelectric switch which participates in control by sending a control signal to the switch in the power supply circuit" ('806, 6:17-17), but Plaintiffs' infringement contentions make the illogical suggestion that a switch which is incapable of sending a control signal can nevertheless send a control

signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined.

Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 1-13) are invalid under § 112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit. *See also* Section V.A.1 above.

Claim 1 and 6 are invalid under 35 U.S.C. § 112(b) because there is no antecedent for "the designated position relative to the main body." The dependent claims fail to cure these deficiencies and are invalid for the same reason.

Claims 1 and 6 are invalid under 35 U.S.C. § 112(b) because there is no antecedent for "the power supply circuit." The dependent claims fail to cure these deficiencies and are invalid for the same reason.

Claims 1 and 6 are invalid under 35 U.S.C. § 112(a) because there is no enabling written description for a control device that "locks" and/or "unlocks" any other component including but

not limited to another control device that starts the motor. The dependent claims fail to cure these deficiencies and are invalid for the same reason.

Claim 2 is invalid under 35 U.S.C. § 112(b) because it is unclear whether it requires both the "switch" and the "signal source device" of claim 1.

Claims 3 and 8 are invalid under 35 U.S.C. § 112(b) because there is no antecedent for "the telescopic tube" (singular) and it is unclear which of the recited tubes (plural) the term refers to. The dependent claims fail to cure these deficiencies and are invalid for the same reason.

Claims 3 and 8 are invalid under 35 U.S.C. § 112(a) and (b) because "the designated position" of claims 1 and 6 is associated with a rotating position ("the handle rotates to the designated position") but claims 3 and 8 recite it as a telescoping position ("when the telescopic tube extends to the designated position"). The patent specification provides no enabling written description of a telescopic tube rotating relative to another telescopic tube or tubes.

Claims 3 and 8 are invalid under 35 U.S.C. § 112(a) and (b) because they recite a "designated position" of one telescopic tube relative to multiple "other telescopic tubes" but the patent specification contains no enabling written description of such an embodiment.

Claims 5 and 10 are invalid under 35 U.S.C. § 112(b) because there is no antecedent for "when the control system is stopping the motor."

Claim 7 is invalid under 35 U.S.C. § 112(b) because it introduces "a power supply circuit" and it is unclear whether it has any relationship to "the power supply circuit" recited in claim 6.

Claim 11 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a contact switch contacted by the trigger.

Claim 13 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a contact switch disposed at an end of a telescoping tube that extends relative to multiple other tubes.

3. The '26686 Patent

Term	Claim(s)
"switch"	1, 2, 3, 4, 9, 11, 12, 13, 14, 19
"power supply circuit"	All claims
"switch" or "signal source"	All claims
"the designated position"	8, 10
"enable the operation of the operation assembly to the motor" / "disable the operation of the operation assembly to the motor"	10
"the one of the plurality of signal sources disable the operation"	10
"the one of the plurality of signal sources"	10
"a plurality of signal sources for sending signal to the power supply circuit"	10
"enabling the operation of the operation assembly to the motor" / "disabling the operation of the operation assembly to the motor"	20

The claim term "switch" is indefinite for failing to distinctly claim the subject matter. "Switch" appears in claims 1, 2, 3, 4, 9, 11, 12, 13, 14, and 19. In independent claim 1, "switch" appears in the context of a "second control device comprises at least one of a switch connected to the power supply circuit and a signal source device for sending a control signal to the power supply circuit." The term "switch" appears again in claim 2, this time, defining a "switch connected to the power supply circuit to connect the electric power source to the motor or disconnect the electric power source to the motor:" a different switch than what appears in claim 1. However, claims 3 and 4, both of which depend on claim 2, and thus include two switches, simply recite "the switch" without indicating the "second control device comprises at least one of

a switch connected to the power supply circuit" found in claim 1 versus the "control system comprises a switch connected to the power supply circuit" found in claim 2 which depends on claim 1. Claims 11, 12, 13, and 14 mirror the uncertainness found in respective claims 1, 2, 3, and 4, as described above.

Claims 1 and 11 are invalid under 35 U.S.C. § 112(b) because there is no antecedent for "the power supply circuit."

Claims 8 and 18 are invalid under 35 U.S.C. § 112(a) and (b) because "the designated position" of claims 1 and 11 is associated with a rotating position ("the handle rotates to a designated position") but claims 8 and 18 recite it as a telescoping position ("…extends to the designated position"). The patent specification provides no enabling written description of a telescopic tube rotating relative to another telescopic tube or tubes.

Additionally, claims 9 and 19, which depend on claims 8 and 18 respectively, also do not indicate whether the "switch" is the "second control device comprises at least one of a switch connected to the power supply circuit" found in claim 1 and 11 versus the "control system comprises a switch connected to the power supply circuit" found in claims 2 and 12 . Even though claims 9 and 19 do not include claims 2 or 12, the term "switch" is being used ambiguously across the several claims. All claims recite a "power supply circuit" and are invalid under §112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as a switch or signal source) is to be considered connected "in" the power control circuit or connected "to" the power control circuit.

Claims 2-7, 9-10, 12-17, 19-20 are invalid under 35 U.S.C. § 112(b) because they introduce "a power supply circuit" and it is unclear whether it has any relationship to "the power supply circuit" recited in claim 1 or 11.

Claims 8 and 18 are invalid under 35 U.S.C. § 112(a) and (b) because "the designated position" of claims 1 and 11 is associated with a rotating position ("the handle rotates to a designated position") but claims 8 and 18 recite it as a telescoping position ("…extends to the designated position"). The patent specification provides no enabling written description of a telescopic tube rotating relative to another telescopic tube or tubes.

Claim 10 is invalid under 35 U.S.C. § 112(b) because each of these phrases is unclear: "enable the operation of the operation assembly to the motor"; "disable the operation of the operation assembly to the motor."

Claim 10 is invalid under 35 U.S.C. § 112(b) because the grammar of this phrase renders the claim unclear: "the one of the plurality of signal sources disable the operation."

Claims 10 and 20 are invalid under 35 U.S.C. § 112(b) because there is no antecedent for "the one of the plurality of signal sources."

Claims 20 is invalid under 35 U.S.C. § 112(b) because this phrase is unclear: "a plurality of signal sources for sending signal to the power supply circuit."

Claim 20 is invalid under 35 U.S.C. § 112(b) because each of these phrases is unclear: "enabling the operation of the operation assembly to the motor"; "disabling the operation of the operation assembly to the motor."

All claims also fail to meet the requirements of section 112(b) for failing to provide reasonable certainty to the distinction between "switch" and "signal source device." *See* Section V.A.3 above.

4. The '86686 Patent

Term	Claim(s)
"power supply circuit"	2-7, 9, 10, 12-17, 19, 20
"switch" / "signal source"	2-4 5-7

Term	Claim(s)
"capable of enabling the operation of the operation assembly to the motor" "disabling the operation of the operation assembly to the motor"	10, 20
"a plurality of signal sources for sending signal to the power supply circuit"	10, 20
"the third control device"	18
"the designated position"	18
"a predetermined position"	20

Claims 2-7, 9, 10, 12-17, 19, and 20 recite a "power supply circuit" and are invalid under §112(b) because the written description fails to inform a person of ordinary skill in the art how to distinguish whether a circuit element (such as a switch or signal source) is to be considered connected "in" the power control circuit or connected "to" the power control circuit. The claim term "switch" is indefinite for failing to distinctly claim the subject matter. Claim 3 requires that the mower (as recited in claim 2) include "the switch" that is "mounted to one of the plurality of telescopic members and rotates with the handle synchronously." Claim 4, on the other hand, requires that the same switch be "mounted to the main body and the handle rotates relatively to the switch." Plaintiffs' infringement contentions assert both claims 3 and 4 and point to multiple switches on the handle and main body of the accused products, suggesting that Plaintiffs themselves cannot articulate how "the switch" (singular) that connects or disconnects the electric power source to the motor can be both (a) "mounted to one of the plurality of telescopic members" as required in claim 3, and at the same time (b) "mounted to the main body" as required in claim 4. Similarly, the term "signal source" is indefinite for the same reasons with respect to claims 5-7 by analogy to claims 2-4 for "switch."

Claims 10 and 20 are invalid under 35 U.S.C. § 112(b) because each of these phrases is unclear: "capable of enabling the operation of the operation assembly to the motor"; "disabling the operation of the operation assembly to the motor."

Claims 10 and 20 are invalid under 35 U.S.C. § 112(b) because this phrase is unclear: "a plurality of signal sources for sending signal to the power supply circuit."

Claims 10 and 20 are invalid under 35 U.S.C. § 112(a) because there is no enabling written description of using plural signal sources to enable or disable operation of the motor based on the position of one telescopic member relative to another.

Claim 18 is invalid under 35 U.S.C. § 112(b) because there is not antecedent basis in claim 18 for "the third control device." The claim is also invalid because it is unclear whether "the designated position" refers to the designated position defined earlier in claim 18 or to the designated position defined in parent claim 11. The dependent claims fail to cure these deficiencies and are invalid for the same reasons.

Claim 20 is invalid under 35 U.S.C. § 112(b) because it is unclear whether "a predetermined position" relates in any way to the "designated" position recited in claim 18.

5. The '588 Patent

Term	Claim(s)
"switch"/ "signal source"	2-4, 5-7
"the third signal source device"	13
"power supply circuit"	2-21
"switch" / "signal source"	15-21
"the signal source"	8
"the signal source enables the operation of the operation assembly of the motor" / "the signal source disables the operation of the operation assembly to the motor"	10
"when the control system is stopping the motor"	14, 18

Term	Claim(s)
"control signal"	11, 15, 16

The claim term "switch" is indefinite for failing to distinctly claim the subject matter. Claim 3 requires that the mower (as recited in claim 2) include "the switch" that is "mounted to one of the plurality of telescopic members and rotates with the handle synchronously." Claim 4, on the other hand, requires that the same switch be "mounted to the main body and the handle rotates relatively to the switch." Plaintiffs' infringement contentions assert both claims 3 and 4 and point to multiple switches on the handle and main body of the accused products, suggesting that Plaintiffs themselves cannot articulate how "the switch" (singular) that connects or disconnects the electric power source to the motor can be both (a) "mounted to one of the plurality of telescopic members," as required in claim 3, and at the same time (b) "mounted to the main body" as required in claim 4. Similarly, the term "signal source" is indefinite for the same reasons with respect to claims 5-7 by analogy to claims 2-4 for "switch."

The claim term "the third signal source device" is indefinite for failing to distinctly claim the subject matter. Claim 13 depends from claim 12, which in turn depends from claim 11. The claim includes the limitation "the third signal source device is one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch." However, despite depending from and thus containing all of the limitations of claims 12 and 11, there is no antecedent basis from which to determine what signal source device is the third. Therefore, claim 13 does not provide reasonable certainty as to the bounds of the invention.

Claims 2-21 recite a "power supply circuit" and are invalid under §112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power control circuit or connected "to" the power control circuit.

Claims 15-21 also fail to meet the requirements of section 112(b) for failing to provide reasonable certainty to the distinction between "switch" and "signal source device." *See* section V.A.5 above.

Claim 8 is invalid under 35 U.S.C. § 112(b) because there is no antecedent for "the signal source."

Claim 10 is invalid under 35 U.S.C. § 112(b) because each of these phrases is unclear: "the signal source enables the operation of the operation assembly to the motor"; "the signal source disables the operation of the operation assembly to the motor."

Claims 14 and 18 are invalid under 35 U.S.C. § 112(b) because there is no antecedent for "when the control system is stopping the motor."

Claims 11, 15 and 16 are invalid under 35 U.S.C. § 112(b) because no purpose or function is recited for the "control signal." The dependent claims fail to cure these deficiencies and are invalid for the same reason.

6. The '772 Patent

Term	Claim(s)
"power supply circuit"	2-10
"switch" / "signal source"	2-4, 5-7
"switch" or "signal source"	1-10
"switch mounted to the main body that is associated with sensing the telescopic extension"	4
"signal source mounted to the main body that is associated with sensing the telescopic extension"	7
"control device … to allow/prevent the motor to be activated by the operation assembly"	8
"safety assembly … positioned between the outer pipe and the inner pipe"	11-15

Term	Claim(s)
"force upon the inner pipe to inhibit the inner pipe from being moved towards the main body"	12-15
"rotatably moveable"	14
"trigger switch"	16

Claims 2-10 recite a "power supply circuit" and are invalid under §112(b) because the written description fails to inform a person of ordinary skill in the art how to distinguish whether a circuit element (such as a switch or signal source) is to be considered connected "in" the power control circuit or connected "to" the power control circuit. The claim term "switch" is indefinite for failing to distinctly claim the subject matter. Claim 3 requires that the mower (as recited in claim 2) include "the switch" that is "mounted to one of the plurality of telescopic members and rotates with the handle synchronously." Claim 4, on the other hand, requires that the same switch be "mounted to the main body and the handle rotates relatively to the switch." Plaintiffs' infringement contentions assert both claims 3 and 4 and point to multiple switches on the handle and main body of the accused products, suggesting that Plaintiffs themselves cannot articulate how "the switch" (singular) that connects or disconnects the electric power source to the motor can be both (a) "mounted to one of the plurality of telescopic members" as required in claim 3, and at the same time (b) "mounted to the main body" as required in claim 4. Similarly, the term "signal source" is indefinite for the same reasons with respect to claims 5-7 by analogy to claims 2-4 for "switch."

Claims 1-10 also fail to meet the requirements of Section 112(b) for failing to provide reasonable certainty to the distinction between "switch" and "signal source device." *See* Section V.A.6 above.

Claim 4 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a switch mounted to the main body that is associated with sensing the telescopic extension of telescoping handle members.

Claim 7 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a signal source mounted to the main body that is associated with sensing the telescopic extension of telescoping handle members.

Claim 8 is invalid under 35 U.S.C. § 112(b) because there is no antecedent for "the signal source."

Claim 8 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of, and it makes no sense for, a "control device … to allow [and to prevent] the motor to be activated by the operation assembly" where the control device has a switch triggered by the operation assembly.

Claims 11-15 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a "safety assembly … positioned between the outer pipe and the inner pipe…."

Claims 12-15 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of component(s) providing a "force upon the inner pipe to inhibit the inner pipe from being moved towards the main body…." There is also no enabling written description of the amount of force to be used to accomplish any intended results.

7. The '176 Patent

Term	Claim(s)
"telescoping pipes"	All claims
"switch" / "signal source"	All claims
"is one of at least one of"	4

Term	Claim(s)
operating assembly including both "trigger" and "button"	12
"a force to inhibit the inner pipe from being moved to the designated sliding position"	17-18
"a component biased towards the inner pipe that is "rotatable relative to the inner pipe"	18
"trigger switch"	19
"second signal source for sending a control signal to the first control device"	21
"second switch for sending a control signal to the first control device"	22
"locking mechanism for locking the rotating position of the operating arm when the operating arm is not rotated relative to the main body"	29
"power supply circuit"	1-10

All claims that recite telescoping or sliding components (*e.g.*, claims 1-30) are invalid under 35 U.S.C. § 112(a) because the specification fails to provide an enabling written description of how those components stay assembled. The disclosure suggests that the telescoping components have nothing to prevent them from being separated, so a self-driven mower would pull away from a user and disassemble the handle. The disclosure also suggests that the telescoping components would collapse into one another due to gravity or any pushing force from the user. A person of ordinary skill would have found such details critical to understanding how to make and use the invention.

All claims that recite the term "switch" or "signal source" or "send(ing) a signal" are invalid under 35 U.S.C. § 112(a) and (b) because the specification tries to distinguish them (*e.g.*, the "first control device may comprise a first switch or a first signal source device, or a combination thereof" ('806, 5:63-64)), and assigns the function of sending a control signal to only a signal source device (*e.g.*, the "first signal source device may be a photoelectric switch

which participates in control by sending a control signal to the switch in the power supply circuit" ('806, 6:17-17), but Plaintiffs' infringement contentions make the illogical suggestion that a switch which is incapable of sending a control signal can nevertheless send a control signal. Accordingly, the scope of all claims reciting a "switch," a "signal source," or "send(ing) a signal" are invalid because the scope of those terms is not adequately set forth in the patents' written description, and the scope of the claims reciting those terms cannot be properly determined. Claim 17 of the '588 patent; claims 2, 4 and 9 of the '806 patent; and claim 7 of the '176 patent illustrate the point (and are invalid under 35 U.S.C. § 112(a), (b) and (d)) because, by requiring the "switch" and the "signal source" to each be "one of a contact switch, a proximity switch, a Hall switch, and a photoelectric switch," they render meaningless the specification's distinction between a "switch" and a "signal source" and renders such claims unclear; the identified claims also fails to further limit the subject matter of its parent claims (112(d)). For similar reasons, all claims reciting a "power supply circuit"(*e.g.*, claims 2-10, 21-22, 27-29) are invalid under § 112(b) because the written description fails to inform persons of ordinary skill in the art how to distinguish whether a circuit element (such as, but not limited to a switch or signal source) is to be considered connected "in" the power supply circuit or connected "to" the power supply circuit; or connected "in" a control circuit as opposed to sending a signal "to" a control circuit (*e.g.*, claims 27-29); or being part of a "control device" as opposed to sending a signal "to" a control device (e.g., claims 21-22).

Claim 4 is invalid under 35 U.S.C. § 112(b) because "is one at least one of" is unclear.

Claim 12 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of the operating assembly including both a "trigger" and a "button."

Claims 17-18 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of component(s) providing a force to inhibit the inner pipe from being moved to the designated sliding position (which is the use position according to parent claim 13).

Claim 18 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a component biased toward the inner pipe that "is rotatable relative to the inner pipe," leaving the scope of the claim unclear.

Claim 19 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description or definition of a "trigger switch" leaving the scope of the term unclear.

Claim 21 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a "second signal source for sending a control signal to the first control device."

Claim 22 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of a "second switch for sending a second control signal to the first control device."

Claim 29 is invalid under 35 U.S.C. § 112(b) because a "locking mechanism for locking the rotating position of the operating arm when the operating arm is not rotated relative to the main body" is unclear.

Claims 1-10 recite a "power supply circuit" and are invalid under §112(b) because the written description fails to inform a person of ordinary skill in the art how to distinguish whether a circuit element (such as a switch or signal source) is to be considered connected "in" the power control circuit or connected "to" the power control circuit.

8. The '420 Patent

Term	Claim(s)
"trigger switch"	1-15
"force upon the inner pipe to inhibit the inner pipe from being moved towards the main body"	2

Term	Claim(s)
"rotatably moveable"	4

Claims 1-15 are invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description or definition of a "trigger switch" leaving the scope of the term unclear. The term "trigger switch" is understood by POSITA to be a "switch that is actuated by pulling a trigger, and is usually mounted in a pistol-grip handle." McGraw-Hill Dictionary of Scientific and Technical Terms (Sixth Edition), 2000, p.2191. No such switch is disclosed, so the claims are not consistent with the written description. The dependent claim recite specific structures for the claimed "safety switch assembly" but never tie those structures to the "trigger switch," leaving the metes and bounds of the "trigger switch" indiscernible.

Claim 2 is invalid under 35 U.S.C. § 112(a) and (b) because there is no enabling written description of component(s) providing a "force upon the inner pipe to inhibit the inner pipe from being moved towards the main body…." There is also no enabling written description of the amount of force to be used to accomplish any intended results.

Claim 4 is invalid under 35 U.S.C. § 112(a) and (b) because it requires that the "moveable element is rotatably moveable." The moveable element must be "biased towards the first member" (*see* claim 3) and corresponds to the disclosed "trigger assembly 242" in Figure 3. That component, however, is a "spring sheet 242" (*id*., 3:39-40) that a person of ordinary skill would understand to flex, not rotate.

VI. ADMISSION OF PRIOR ART

During prosecution of the asserted patents, including in response to six Inter Partes Review and Post-Grant Review petitions, Plaintiffs made numerous admissions concerning prior art in the specification and/or the prosecution history, including admissions that certain claim limitations were present in the prior art. Plaintiffs are thus estopped from taking positions

inconsistent with their admissions in the prosecution history. During the various post-grant proceedings concerning patents related to the asserted patents, Plaintiffs also made numerous admissions concerning prior art, including admissions that certain claim limitations were present in the prior art. Plaintiffs are thus estopped from taking positions inconsistent with their admissions in these proceedings. Defendants reserves the right to assert that Plaintiffs should be estopped from arguing that prior art does not disclose the claim elements that Chervon has already admitted are disclosed in the prior art.

VII. INEQUITABLE CONDUCT DURING PROSECUTION

Greenberg Traurig, the law firm representing Plaintiff, is the same law firm that prosecuted Plaintiff's asserted patents and continues to prosecute related continuation-type applications. Greenberg Traurig and/or Plaintiff committed inequitable conduct[2] during prosecution of at least the following asserted patents: U.S. Patent 9,596,806 ("'806 patent"); U.S. Patent 9,826,686 ("'26686 patent"); U.S. Patent 10,070,588 ("'588 patent").

Inequitable conduct is an equitable defense to patent infringement. *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1285 (Fed. Cir. 2011) (en banc). It is proven "by clear and convincing evidence that the patent applicant (1) misrepresented or omitted information material to patentability, and (2) did so with specific intent to mislead or deceive the PTO." *Ohio Willow Wood Co. v. Alps S., LLC*, 735 F.3d 1333, 1344 (Fed. Cir. 2013) (citations omitted). Intent and materiality must be separately established. *Therasense*, 649 F.3d at 1290.

[2] Given the recent revelations at the PTAB, One World intends to seek leave to amend its answer to add inequitable conduct.

A. Omission of information material to patentability.

In November 2020, the United States Patent Trial and Appeal Board ("PTAB") determined that Plaintiff and/or its representatives from Greenberg Traurig withheld material information from the patent examiners responsible for granting the '806 patent, the '26686 patent, and the '588 patent. The PTAB identified "particularly relevant" portions of a prior art publication to Wolf Outils including a "key" drawing figure that was withheld. This conclusion was reached as the PTAB evaluated the unpatentability of claims granted in the '806 patent, the '26686 patent, and the '588 patent in light of Outils in combination with secondary prior art references. The PTAB's conclusion was that the "particularly relevant" portions of the Outils reference constituted information that "the applicant was required to provide the Office and did not." See IPR2020-00884, Decision Granting Institution of Inter Partes Review (Paper No. 20) at 28; IPR2020-00886, Decision Granting Institution of Inter Partes Review (Paper No. 21) at 26; IPR2020-00888, Decision Granting Institution of Inter Partes Review (Paper No. 20) at 21.

The PTAB's conclusion in each of IPR2020-00884, IPR2020-00886, and IPR2020-00888, was expressed concurrently with its initial determinations that the Petitioner in those proceedings had demonstrated the likely unpatentability of claims on the basis of Outils, as a primary reference, combined with certain secondary references. Prior to that initial determination, Greenberg Traurig submitted arguments to the PTAB that now constitute admissions by Plaintiff (see FRE 801). Those admissions are that the secondary prior art references were, in Greenberg Traurig's words, "cumulative" of other prior art that had been before the patent examiners. See IPR2020-00884, Patent Owner Preliminary Response (Paper No. 11), at 11-18; IPR2020-00886, Patent Owner Preliminary Response (Paper No. 11), at 13-19; IPR2020-00888, Patent Owner Preliminary Response (Paper No. 11), at 9-15. Those

admissions, in combination with the PTAB's initial determinations of unpatentability in light of Outils and those secondary references, make clear that the withheld material information from Outils meets a "but for" materiality standard. *See Therasense*, 649 F.3d at 1291.

B. Intent to mislead or deceive the USPTO

Intent to deceive can be shown by direct or circumstantial evidence. *Therasense*, 649 F.3d at 1290. In each of the aforementioned IPR proceedings, Greenberg Traurig, on behalf of Plaintiff, contested that information from Outils was withheld from the patent examiners. Greenberg Traurig argued that each patent examiner "had Outils'[s] figures at his fingertips through a quick Internet search." The PTAB dismissed this argument, but Greenberg Traurig's argument is an admission that both Plaintiff and Greenberg Traurig themselves had the full Outils reference easily available at their fingertips as they shirked their duty to disclose the "particularly relevant" portion of Outils. See 37 CFR 1.56; 37 CFR 1.98(a)(2); MPEP 609.04(a)(II)(Rev. 07.2015, Nov. 2015). In addition, Greenberg Traurig submitted the less material portion of the Outils reference to the USPTO in a separate submission, highlighting Plaintiff's and/or Green-berg Traurig's knowledge of Outils' material relevance to the then-pending claims and their de-sire to have Outils appear to have been fully considered by the examiners. As determined by the PTAB, however, Plaintiff's and/or Greenberg Traurig's actions, or rather, their deliberate omissions, deprived the examiner of the opportunity to fully consider Outils before granting the patents. For at least these reasons, intent to deceive the USPTO is demonstrated by direct and/or circumstantial evidence.

VIII. DOCUMENT PRODUCTION ACCOMPANYING THESE DISCLOSURES

Pursuant to Paragraph 4(d), Defendants have produced documents comprising or relating to the prior art references and prosecution history documents identified above at TTI1293_00000239 - TTI1293_00000356, TTI1293_00003694 - TTI1293_00005274, TTI1293_00007789 – TTI1293_00009464.

Dated: December 17, 2020

OF COUNSEL

Sean C. Cunningham (admitted *Pro Hac Vice*)
Erin P. Gibson (admitted *Pro Hac Vice*)
David R. Knudson (admitted *Pro Hac Vice*)
DLA Piper LLP (US)
401 B. Street, Suite 1700
San Diego, CA 92101-4297
Telephone: 619.699.2900
Facsimile: 619.764.6600
sean.cunningham@us.dlapiper.com
erin.gibson@us.dlapiper.com
david.knudson@us.dlapiper.com

Damon M. Lewis (admitted *Pro Hac Vice*)
DLA Piper LLP (US)
500 Eighth Street NW
Washington, DC 20004
Telephone: 202.799.4573
Facsimile: 202.799.5362
damon.lewis@us.dlapiper.com

DLA PIPER LLP (US)

/s/ Brian A. Biggs
Brian A. Biggs (DE Bar No. 5591)
Erin E. Larson (DE Bar No 6616)
1201 North Market Street, Suite 2100
Wilmington, DE 19801-1147
Telephone: 302.468.5700
Facsimile: 302.394.2341
brian.biggs@us.dlapiper.com
erin.larson@us.dlapiper.com

Attorneys for Defendants One World Technologies, Inc., Techtronic Industries Co. Ltd., and Homelite Consumer Products, Inc.

CERTIFICATE OF SERVICE

I, Brian A. Biggs, do hereby certify that on this 17th day of December, 2020, I caused a true and correct copy of the foregoing **DEFENDANT'S FINAL INVALIDITY CONTENTIONS** to be served on the following attorneys of record in the manner indicated:

VIA ELECTRONIC MAIL

Benjamin J. Schladweiler
Greenberg Traurig LLP
The Nemours Bldg.
1007 North Orange Street, Ste. 1200
Wilmington, DE 19801
(302) 661-7000
schladweilerb@gtlaw.com

Michael A. Nicodema
Greenberg Traurig LLP
500 Campus Drive, Ste. 400
Florham Park, NJ 07932
(973) 360-7900
nicodemam@gtlaw.com

James J. Lukas, Jr.
Matthew J. Levinstein
Callie J. Sand
Benjamin P. Gilford
77 West Wacker Drive, Ste. 3100
Chicago, IL 60601
(312) 456-8400
lukasj@gtlaw.com
levinsteinm@gtlaw.com
sandc@gtlaw.com
gilfordb@gtlaw.com

/s/ Brian A. Biggs
Brian A. Biggs (DE Bar No. 5591)